

Who is most at risk of HIV infection? Detailed data tables and technical notes

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases who were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2012, this resulted in the removal of 3,529 HIV/AIDS cases, of which 914 have died and 2,615 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Background on HIV reporting system

On January 1, 1999 the Massachusetts Department of Public Health (MDPH) started requiring healthcare providers to submit case report forms, with demographic and risk

information on individuals diagnosed with HIV infection, as they had been doing for AIDS since 1983. Existing cases of HIV infection diagnosed through 1998 also were to be reported by the end of 1999. When comparing HIV infection diagnosed before 1999 to HIV infection diagnosed after 1999, one should consider the differences in HIV reporting requirements for these two time periods. Since HIV was not reported at diagnosis prior to 1999 and clinical providers were given a relatively short time frame within which to report all prevalent HIV cases, the pre-1999 data are considered less complete than data reported after 1999. Additionally, pre-1999 HIV infection diagnoses do not include people who were diagnosed with HIV infection and who died before 1999 without being reported with AIDS, nor do they include individuals who were no longer receiving HIV-related health care in Massachusetts at the point when HIV (non-AIDS) reporting became mandatory.

Caveats of the data

While trends in new HIV diagnoses are the best indicator for those who are presently most at risk of HIV infection, HIV surveillance reflects only incident diagnoses among people who are in care and not the actual incidence of new infections. Like AIDS diagnoses, HIV infection diagnoses are not a direct measure of incidence of infection itself. People may be living with HIV infection for many years prior to being tested and seeking care, at which point the case is considered a “diagnosis” and reported to the MDPH HIV/AIDS Surveillance Program. Furthermore, as with early data for AIDS cases, the data from the first few years of a new reporting system can be unstable, and caution should be used in interpretation. During the time a reporting system is in its infancy, there is a greater likelihood that fluctuations in data are attributable to reporting patterns and clinician education efforts rather than actual changes in incidence.

One must consider the effects of reporting lag on reported HIV infection diagnoses in the most recent years. Although Massachusetts regulations require providers to submit HIV case reports in a timely fashion, many 2011 HIV infection diagnoses will be reported to the surveillance program after the release of this Epidemiologic Profile. Thus, the 2011 data presented in this report may represent an undercount. Previous analyses of Massachusetts HIV/AIDS case data have suggested that the distribution of HIV infection diagnoses by race/ethnicity, gender and exposure mode for cases reported more than 6 months after diagnosis was not substantially different than the distribution of HIV cases reported within 6 months. Caution should be exercised when considering changes in HIV diagnosis trends for 2011.

Table 1. People diagnosed with HIV infection by gender and year of diagnosis: Massachusetts¹ 2002–2011²

	Male		Female		Total
	N	%	N	%	
2002	706	68%	337	32%	1,043
2003	629	67%	304	33%	933
2004	637	71%	266	29%	903
2005	633	73%	235	27%	868
2006	557	72%	221	28%	778
2007	519	71%	207	29%	726
2008	523	73%	193	27%	716
2009	505	75%	164	25%	669
2010	469	72%	184	28%	653
2011	473	72%	184	28%	657

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 2. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts¹, 2002–2011²

	White (NH)		Black (NH)		Hispanic/Latino		API		Total ³
	N	%	N	%	N	%	N	%	N
2002	402	39%	368	35%	246	24%	21	2%	1,043
2003	373	40%	324	35%	217	23%	13	1%	933
2004	342	38%	304	34%	239	26%	14	2%	903
2005	341	39%	295	34%	213	25%	16	2%	868
2006	325	42%	242	31%	190	24%	17	2%	778
2007	300	41%	234	32%	174	24%	16	2%	726
2008	282	39%	235	33%	168	23%	26	4%	716
2009	262	39%	225	34%	163	24%	19	3%	669
2010	259	40%	209	32%	163	25%	19	3%	653
2011	231	35%	231	35%	162	25%	24	4%	657

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Totals include American Indian/Alaskan Native individuals and those of other or undetermined race/ethnicity

NH = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 3. Males diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts¹, 2002–2011²

	White (NH)		Black (NH)		Hispanic/ Latino		API		Total ³
	N	%	N	%	N	%	N	%	N
2002	330	47%	195	28%	163	23%	14	2%	706
2003	314	50%	169	27%	133	21%	9	1%	629
2004	299	47%	167	26%	157	25%	11	2%	637
2005	303	48%	166	26%	149	24%	14	2%	633
2006	279	50%	124	22%	137	25%	13	2%	557
2007	245	47%	139	27%	123	24%	10	2%	519
2008	253	48%	129	25%	114	22%	22	4%	523
2009	229	45%	141	28%	120	24%	15	3%	505
2010	224	48%	111	24%	117	25%	16	3%	469
2011	194	41%	134	28%	120	25%	19	4%	473

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Totals include American Indian/Alaskan Native individuals and those of other or undetermined race/ethnicity

NH = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 4. Females diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts¹, 2002–2011²

	White (NH)		Black (NH)		Hispanic/ Latina		API		Total ³
	N	%	N	%	N	%	N	%	N
2002	72	21%	173	51%	83	25%	7	2%	337
2003	59	19%	155	51%	84	28%	4	1%	304
2004	43	16%	137	52%	82	31%	3	1%	266
2005	38	16%	129	55%	64	27%	2	1%	235
2006	46	21%	118	53%	53	24%	4	2%	221
2007	55	27%	95	46%	51	25%	6	3%	207
2008	29	15%	106	55%	54	28%	4	2%	193
2009	33	20%	84	51%	43	26%	4	2%	164
2010	35	19%	98	53%	46	25%	3	2%	184
2011	37	20%	97	53%	42	23%	5	3%	184

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Totals include American Indian/Alaskan Native individuals and those of other or undetermined race/ethnicity

(NH) = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 5. People diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹, 2002–2011²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2002	603	58%	94	9%	346	33%	1,043
2003	573	61%	81	9%	279	30%	933
2004	542	60%	98	11%	263	29%	903
2005	521	60%	77	9%	270	31%	868
2006	479	62%	57	7%	242	31%	778
2007	448	62%	57	8%	221	30%	726
2008	435	61%	67	9%	214	30%	716
2009	410	61%	48	7%	211	32%	669
2010	402	62%	44	7%	207	32%	653
2011	404	61%	39	6%	214	33%	657

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 6. Males diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹, 2002–2011²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2002	448	63%	59	8%	199	28%	706
2003	442	70%	39	6%	148	24%	629
2004	434	68%	63	10%	140	22%	637
2005	417	66%	53	8%	163	26%	633
2006	373	67%	40	7%	144	26%	557
2007	346	67%	39	8%	134	26%	519
2008	359	69%	41	8%	123	24%	523
2009	340	67%	31	6%	134	27%	505
2010	328	70%	34	7%	107	23%	469
2011	321	68%	27	6%	125	26%	473

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 7. Females diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹ 2002–2011²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2002	155	46%	35	10%	147	44%	337
2003	131	43%	42	14%	131	43%	304
2004	108	41%	35	13%	123	46%	266
2005	104	44%	24	10%	107	46%	235
2006	106	48%	17	8%	98	44%	221
2007	102	49%	18	9%	87	42%	207
2008	76	39%	26	13%	91	47%	193
2009	70	43%	17	10%	77	47%	164
2010	74	40%	10	5%	100	54%	184
2011	83	45%	12	7%	89	48%	184

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² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 8. People diagnosed with HIV infection by exposure mode and year of diagnosis: Massachusetts¹, 2002–2011²

	MSM		IDU		MSM/ IDU		HTSX		Pres. HTSX ³		Undeter- mined ⁴		Total ⁵
	N	%	N	%	N	%	N	%	N	%	N	%	N
2002	316	30%	189	18%	32	3%	180	17%	123	12%	196	19%	1,043
2003	308	33%	144	15%	33	4%	131	14%	126	14%	177	19%	933
2004	288	32%	145	16%	26	3%	132	15%	110	12%	191	21%	903
2005	332	38%	120	14%	23	3%	109	13%	96	11%	183	21%	868
2006	322	41%	96	12%	17	2%	98	13%	99	13%	141	18%	778
2007	275	38%	98	13%	21	3%	81	11%	81	11%	165	23%	726
2008	279	39%	71	10%	30	4%	92	13%	78	11%	160	22%	716
2009	295	44%	45	7%	17	3%	87	13%	65	10%	155	23%	669
2010	266	41%	62	9%	18	3%	79	12%	79	12%	143	22%	653
2011	247	38%	55	8%	18	3%	83	13%	71	11%	180	27%	657

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Totals include pediatric and blood/blood products exposure modes

MSM = Male-to-Male Sex; IDU = Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Note: The category of “presumed heterosexual” is used in Massachusetts to re-assign females who are reported with an exposure of heterosexual sex, but only with a partner of unknown HIV status or behavioral risk. Massachusetts uses the category of presumed heterosexual to distinguish these female cases from other undetermined cases about which we know less. Prior to January 1, 2011, the presumed heterosexual category was also used to report HIV data in males. The rationale for the application of the presumed heterosexual exposure mode category to females only has been addressed in the MDPH OHA report “Intersecting Risks: HIV Infection among Heterosexual Women and Men in Massachusetts.” (2010) http://www.mass.gov/Eeohhs2/docs/dph/aids/intersecting_risks.pdf. Nationally, the Centers for Disease Control and Prevention categorize “presumed heterosexual” cases as “no identified risk” (NIR). As such, comparisons of the presumed heterosexual category cannot be made to national data. Caution should be used in interpreting data for presumed heterosexual, as it is still not clear what the exposure risk was for females in this category. Although a person may not report other risk behaviors, such as injection drug use to a health care provider, it does not exclude the possibility that an individual has experienced these other risks. There are many barriers to disclosing HIV risk behaviors in the health care setting such as a limited patient-provider relationship or stigma.

Table 9. Males diagnosed with HIV infection by exposure mode and year of diagnosis: Massachusetts¹, 2002–2011²

	MSM		IDU		MSM/ IDU		HTSX		Undeter- mined ³		Total ⁴
	N	%	N	%	N	%	N	%	N	%	N
2002	316	45%	130	18%	32	5%	60	8%	163	23%	706
2003	308	49%	93	15%	33	5%	42	7%	143	23%	629
2004	288	45%	100	16%	26	4%	47	7%	171	27%	637
2005	332	52%	88	14%	23	4%	34	5%	156	25%	633
2006	322	58%	49	9%	17	3%	42	8%	125	22%	557
2007	275	53%	60	12%	21	4%	27	5%	134	26%	519
2008	279	53%	45	9%	30	6%	28	5%	135	26%	523
2009	295	58%	31	6%	17	3%	26	5%	134	27%	505
2010	266	57%	40	9%	18	4%	24	5%	118	25%	469
2011	247	52%	35	7%	18	4%	23	5%	149	32%	473

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁴ Totals include pediatric and blood/blood products exposure modes.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; HTSX = Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 10. Females diagnosed with HIV infection by exposure mode and year of diagnosis: Massachusetts¹, 2002–2011²

	IDU		HTSX		Pres. HTSX ³		Undeter-mined ⁴		Total ⁵
	N	%	N	%	N	%	N	%	N
2002	59	18%	120	36%	123	36%	33	10%	337
2003	51	17%	89	29%	126	41%	34	11%	304
2004	45	17%	85	32%	110	41%	20	8%	266
2005	32	14%	75	32%	96	41%	27	11%	235
2006	47	21%	56	25%	99	45%	16	7%	221
2007	38	18%	54	26%	81	39%	31	15%	207
2008	26	13%	64	33%	78	40%	25	13%	193
2009	14	9%	61	37%	65	40%	21	13%	164
2010	22	12%	55	30%	79	43%	25	14%	184
2011	20	11%	60	33%	71	39%	31	17%	184

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² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up.

⁵ Totals include pediatric and blood/blood products exposure modes

IDU = Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 11. People diagnosed with HIV infection by age at diagnosis: Massachusetts¹, 2002–2011²

Year	<13		13–19		20–24		25–29		30–34		35–39		40–44		45–49		50–54		55–59		60+		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2002	4	<1%	22	2%	70	7%	125	12%	185	18%	223	21%	183	18%	103	10%	64	6%	35	3%	29	3%	1,043
2003	9	1%	18	2%	57	6%	90	10%	158	17%	200	21%	161	17%	118	13%	64	7%	28	3%	30	3%	933
2004	10	1%	19	2%	54	6%	97	11%	128	14%	183	20%	163	18%	117	13%	67	7%	36	4%	29	3%	903
2005	5	1%	8	1%	59	7%	89	10%	140	16%	148	17%	179	21%	124	14%	58	7%	35	4%	23	3%	868
2006	4	1%	19	2%	60	8%	86	11%	96	12%	140	18%	138	18%	109	14%	58	7%	42	5%	26	3%	778
2007	4	1%	13	2%	55	8%	78	11%	83	11%	130	18%	126	17%	110	15%	60	8%	36	5%	31	4%	726
2008	6	1%	18	3%	57	8%	100	14%	90	13%	77	11%	118	16%	102	14%	73	10%	40	6%	35	5%	716
2009	3	0%	19	3%	57	9%	67	10%	90	13%	91	14%	100	15%	108	16%	62	9%	37	6%	35	5%	669
2010	6	1%	12	2%	59	9%	65	10%	80	12%	103	16%	93	14%	100	15%	68	10%	35	5%	32	5%	653
2011	3	0%	21	3%	60	9%	75	11%	80	12%	83	13%	110	17%	93	14%	56	9%	37	6%	39	6%	657

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² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 12. Males diagnosed with HIV infection by age at diagnosis: Massachusetts¹, 2002–2011²

Year	<13		13–19		20–24		25–29		30–34		35–39		40–44		45–49		50–54		55–59		60+		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2002	2	0%	10	1%	39	6%	73	10%	116	16%	162	23%	132	19%	75	11%	49	7%	24	3%	24	3%	706
2003	6	1%	9	1%	34	5%	46	7%	109	17%	148	24%	112	18%	74	12%	50	8%	22	3%	19	3%	629
2004	4	1%	9	1%	36	6%	63	10%	83	13%	147	23%	115	18%	86	14%	42	7%	29	5%	23	4%	637
2005	0	0%	5	1%	40	6%	67	11%	100	16%	109	17%	135	21%	95	15%	42	7%	24	4%	16	3%	633
2006	2	0%	9	2%	39	7%	56	10%	67	12%	109	20%	102	18%	79	14%	46	8%	28	5%	20	4%	557
2007	1	0%	6	1%	42	8%	55	11%	53	10%	98	19%	89	17%	80	15%	49	9%	25	5%	21	4%	519
2008	6	1%	12	2%	46	9%	72	14%	61	12%	53	10%	88	17%	79	15%	53	10%	28	5%	25	5%	523
2009	1	0%	14	3%	48	10%	53	10%	64	13%	67	13%	74	15%	90	18%	44	9%	25	5%	25	5%	505
2010	3	1%	7	1%	43	9%	52	11%	56	12%	70	15%	70	15%	78	17%	51	11%	18	4%	21	4%	469
2011	1	0%	12	3%	52	11%	57	12%	53	11%	57	12%	82	17%	66	14%	42	9%	25	5%	26	5%	473

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 13. Females diagnosed with HIV infection by age at diagnosis: Massachusetts¹, 2002–2011²

	<13		13–19		20–24		25–29		30–34		35–39		40–44		45–49		50–54		55–59		60+		Total
Year	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2002	2	1%	12	4%	31	9%	52	15%	69	20%	61	18%	51	15%	28	8%	15	4%	11	3%	5	1%	337
2003	3	1%	9	3%	23	8%	44	14%	49	16%	52	17%	49	16%	44	14%	14	5%	6	2%	11	4%	304
2004	6	2%	10	4%	18	7%	34	13%	45	17%	36	14%	48	18%	31	12%	25	9%	7	3%	6	2%	266
2005	5	2%	3	1%	19	8%	22	9%	40	17%	39	17%	44	19%	29	12%	16	7%	11	5%	7	3%	235
2006	2	1%	10	5%	21	10%	30	14%	29	13%	31	14%	36	16%	30	14%	12	5%	14	6%	6	3%	221
2007	3	1%	7	3%	13	6%	23	11%	30	14%	32	15%	37	18%	30	14%	11	5%	11	5%	10	5%	207
2008	0	0%	6	3%	11	6%	28	15%	29	15%	24	12%	30	16%	23	12%	20	10%	12	6%	10	5%	193
2009	2	1%	5	3%	9	5%	14	9%	26	16%	24	15%	26	16%	18	11%	18	11%	12	7%	10	6%	164
2010	3	2%	5	3%	16	9%	13	7%	24	13%	33	18%	23	13%	22	12%	17	9%	17	9%	11	6%	184
2011	2	1%	9	5%	8	4%	18	10%	27	15%	26	14%	28	15%	27	15%	14	8%	12	7%	13	7%	184

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 14. People diagnosed with HIV infection by Health Service Region (HSR)¹: Massachusetts², 2002–2011³

	Boston		Central		Metro West		Northeast		Southeast		Western		Prisons⁴		Total⁵
Year	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2002	343	33%	104	10%	150	14%	165	16%	152	15%	104	10%	25	2%	1,043
2003	295	32%	87	9%	142	15%	162	17%	116	12%	101	11%	30	3%	933
2004	261	29%	84	9%	122	14%	155	17%	116	13%	122	14%	43	5%	903
2005	282	32%	70	8%	137	16%	142	16%	103	12%	96	11%	38	4%	868
2006	232	30%	80	10%	102	13%	134	17%	113	15%	90	12%	27	3%	778
2007	207	29%	61	8%	121	17%	119	16%	114	16%	81	11%	23	3%	726
2008	209	29%	56	8%	117	16%	136	19%	89	12%	76	11%	32	4%	716
2009	193	29%	54	8%	120	18%	108	16%	109	16%	64	10%	21	3%	669
2010	202	31%	56	9%	108	17%	109	17%	84	13%	72	11%	22	3%	653
2011	209	32%	61	9%	97	15%	109	17%	85	13%	69	11%	26	4%	657

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

⁴ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

⁵ Totals include two people of unknown HSR

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

People diagnosed with HIV infection from 2009–2011

Table 15. People diagnosed with HIV infection by gender and race/ethnicity: Massachusetts¹, 2009–2011²

Race/Ethnicity:	Male		Female	
	N	%	N	%
White, non-Hispanic	647	45%	105	20%
Black, non-Hispanic	386	27%	279	52%
Hispanic/Latino	357	25%	131	25%
Asian/Pacific Islander	50	3%	12	2%
Other/Unknown	7	<1%	5	1%
Total	1,447	100%	532	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); Data as of 1/1/13

Table 16. People diagnosed with HIV infection by gender and exposure mode: Massachusetts¹, 2009–2011²

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	808	56%	N/A	N/A
Injection drug use (IDU)	106	7%	56	11%
MSM/IDU	53	4%	N/A	N/A
Heterosexual sex	73	5%	176	33%
Other	6	<1%	8	2%
Total undetermined/other	401	28%	292	55%
• Presumed Heterosexual Sex ³	N/A	N/A	215	40%
• Undetermined ⁴	401	28%	77	14%
Total	1,447	100%	532	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A = Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 17. People diagnosed with HIV infection by race/ethnicity¹ and place of birth: Massachusetts², 2009–2011³

Race/Ethnicity:	US		Puerto Rico/ US Dependency ⁴		Non-US	
	N	%	N	%	N	%
White (NH)	691	92%	-- ⁵	<1%	60	8%
Black (NH)	328	49%	-- ⁵	<1%	336	51%
Hispanic/Latino	170	35%	129	26%	189	39%
API	19	31%	0	0%	43	69%
Total	1,216	61%	--⁵	7%	632	32%

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

(NH) = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 18. Males diagnosed with HIV infection by race/ethnicity¹ and place of birth: Massachusetts², 2009–2011³

Race/Ethnicity:	US		Puerto Rico/ US Dependency ⁴		Non-US	
	N	%	N	%	N	%
White (NH)	590	91%	-- ⁶	<1%	56	9%
Black (NH)	247	64%	0	0%	139	36%
Hispanic/Latino	131	37%	91	25%	135	38%
API	15	30%	0	0%	35	70%
All Males⁵	989	68%	--⁶	6%	366	25%

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Totals include people of American Indian/Alaska Native and Other/Unknown race/ethnicity.

⁶ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

(NH) = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 19. Females diagnosed with HIV infection by race/ethnicity¹ and place of birth: Massachusetts², 2009–2011³

	US		Puerto Rico/ US Dependency ⁴		Non-US	
Race/Ethnicity:	N	%	N	%	N	%
White (NH)	101	96%	0	0%	4	4%
Black (NH)	81	29%	-- ⁶	<1%	197	71%
Hispanic/Latino	39	30%	38	29%	54	41%
All Females⁵	227	43%	--⁶	7%	266	50%

¹ Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Totals include people of American Indian/Alaska Native and Other/Unknown race/ethnicity.

⁶ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

(NH) = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 20. People diagnosed with HIV infection by race/ethnicity¹ and exposure mode: Massachusetts², 2009–2011³

Exposure Mode:	White (NH)		Black (NH)		Hispanic/Latino	
	N	%	N	%	N	%
Male-to-male sex (MSM)	479	64%	134	20%	153	31%
Injection drug use (IDU)	65	9%	33	5%	62	13%
MSM/IDU	35	5%	9	1%	8	2%
Heterosexual sex	35	5%	124	19%	87	18%
Other	0	0%	8	1%	5	1%
Total undetermined/other	138	18%	357	54%	173	35%
• Presumed heterosexual sex ⁴	24	3%	138	21%	44	9%
• Undetermined ⁵	114	15%	219	33%	129	26%
Total	752	100%	665	100%	488	100%

¹ Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

(NH) = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 21. Males diagnosed with HIV infection by race/ethnicity¹ and exposure mode: Massachusetts², 2009–2011³

Exposure Mode:	White (NH)		Black (NH)		Hispanic/Latino	
	N	%	N	%	N	%
Male-to-male sex (MSM)	479	74%	134	35%	153	43%
Injection drug use (IDU)	28	4%	28	7%	48	13%
MSM/IDU	35	5%	9	2%	8	2%
Heterosexual sex	9	1%	33	9%	31	9%
Undetermined ⁴	96	15%	179	46%	114	32%
Total⁵	647	100%	386	100%	357	100%

¹ Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Totals include pediatric and blood/blood products exposure modes.

(NH) = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 22. Females diagnosed with HIV infection by race/ethnicity¹ and exposure mode: Massachusetts², 2009–2011³

Exposure Mode:	White (NH)		Black (NH)		Hispanic/Latina	
	N	%	N	%	N	%
Injection drug use	37	35%	5	2%	14	11%
Heterosexual sex	26	25%	91	33%	56	43%
Total undetermined/other	42	40%	178	64%	59	45%
• Presumed heterosexual sex ⁴	24	23%	138	49%	44	34%
• Undetermined ⁵	18	17%	40	14%	15	11%
Total⁶	105	100%	279	100%	131	100%

¹ Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up.

⁶ Totals include pediatric and blood/blood products exposure modes.

(NH) = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 23. People diagnosed with HIV infection by Health Service Region (HSR)¹ and gender: Massachusetts², 2009–2011³

Health Service Region:	Male		Female		Total
	N	%	N	%	N
Boston HSR	457	76%	147	24%	604
Central HSR	110	64%	61	36%	171
Metro West HSR	250	77%	75	23%	325
Northeast HSR	225	69%	101	31%	326
Southeast HSR	197	71%	81	29%	278
Western HSR	147	72%	58	28%	205
Prisons ⁴	61	88%	8	12%	69
Mass. Total	1,447	73%	532	27%	1,979

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999

⁴ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 24. Percentage distribution of people diagnosed with HIV infection by Health Service Region (HSR)¹ and race/ethnicity: Massachusetts², 2009–2011³

	White (NH)	Black (NH)	Hispanic/ Latino	API	Total
HSR	%	%	%	%	N
Boston HSR	32%	43%	22%	2%	604
Central HSR	36%	39%	23%	2%	171
Metro West HSR	44%	32%	19%	5%	325
Northeast HSR	34%	29%	32%	6%	326
Southeast HSR	54%	31%	13%	1%	278
Western HSR	37%	19%	42%	2%	205
Prisons ⁴	25%	30%	41%	3%	69
Mass. Total	38%	34%	25%	3%	1,979

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

(NH) = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 25. Percentage distribution of people diagnosed with HIV infection by Health Service Region (HSR)¹ and exposure mode: Massachusetts², 2009–2011³

	MSM	IDU	MSM/ IDU	HTSX	Other	Pres. HTSX ⁴	Undet. ⁵	Total
HSR	%	%	%	%	%	%	%	N
Boston	47%	6%	2%	11%	1%	12%	21%	604
Central	31%	8%	4%	20%	1%	13%	23%	171
Metro West	47%	4%	4%	10%	1%	9%	25%	325
Northeast	33%	7%	2%	13%	1%	11%	33%	326
Southeast	42%	7%	2%	13%	0%	12%	23%	278
Western	39%	13%	1%	12%	<1%	9%	24%	205
Prison ⁶	20%	43%	6%	14%	0%	1%	14%	69
Total	41%	8%	3%	13%	1%	11%	24%	1,979

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at

http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex; Undet. = Undetermined

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Profile of people testing for HIV at publicly-funded sites

Technical Notes:

Program utilization data for HIV/AIDS prevention services describe people who utilize these services and who may be at risk for HIV infection. The following tables contain data on clients utilizing state-funded counseling and testing sites. These settings include community health centers, hospitals, jails and sexually transmitted disease clinics. An estimated 30% of people who get tested for HIV infection in Massachusetts get tested at one of these sites; therefore, these data are not representative of all people testing for HIV infection in Massachusetts. It is important to note that the data presented in this section represent tests performed and not individual clients; therefore the data may contain more than one test for some people.

Table 26. Number and percent of positive HIV tests¹ by gender, race/ethnicity, and age of client: Massachusetts, 2011			
HIV Tests by Gender of Client:	Total Tests	Total Positive Results²	Percent Positive
Male	37,148	415	1.1%
Female	27,607	138	0.5%
Transgender	188	8	4.3%
Unknown ²	461	5	1.1%
HIV Tests by Race/Ethnicity of Client:	Total Tests	Total Positive Results	Percent Positive
White (non-Hispanic)	21,398	218	1.0%
Black (non-Hispanic)	20,492	173	0.8%
Hispanic/Latino	18,894	146	0.8%
Asian	1,513	4	0.3%
Native Hawaiian/Pacific Islander	37	0	0.0%
American Indian/Alaska Native	153	2	1.3%
Multi-race	563	6	1.1%
Unknown ³	2,354	17	0.7%
HIV Tests by Age of Client, in Years:	Total Tests	Total Positive Results	Percent Positive
Under 13	69	2	2.9%
13 to 19	4,304	10	0.2%
20 to 24	12,959	33	0.3%
25 to 29	12,354	72	0.6%
30 to 34	9,496	55	0.6%
35 to 39	6,615	65	1.0%
40 to 44	5,837	91	1.6%
45 to 49	5,146	98	1.9%
50 to 54	3,503	66	1.9%
55 to 59	2,009	26	1.3%
60 +	2,312	38	1.6%
Unknown ³	800	10	1.3%
Total	65,404	566	0.9%
¹ Tests performed at publicly funded HIV counseling and testing sites			
² Positive tests include both new and previously known positive tests based on client self report			
³ Unknown indicates that the data were missing or unreadable			
Data Source: MDPH Office of HIV/AIDS HIV Counseling and Testing Program; data as of 2/14/13			

Technical Notes:

The following tables include data about number of sexual partners and condom use as reported by Massachusetts residents through anonymous telephone interviews in 2011. This ongoing random-digit-dial telephone survey, the Behavioral Risk Factor Surveillance System (BRFSS), covers a broad range of topic areas (including sexually-related risk) and is part of a CDC-funded national survey program.

Sex with multiple partners has historically been correlated with other predictors of HIV transmission. Reducing numbers of sexual partners has been an HIV/STD prevention intervention strategy, as has increasing condom use. Data regarding the prevalence of each of these behaviors follows.

Table 27. Number of sexual partners in past year¹ among adult BRFSS respondents ages 18–64 years: Massachusetts, 2011				
	0 Partners	1 Partner	2 + Partners	N²
Total:	21%	69%	11%	3,598
Age in Years:	0 Partners	1 Partner	2 + Partners	N
18–24	23.1%	46.8%	30.2%	118
25–34	16.1%	71.8%	12.1%	430
35–44	10.6%	80.3%	9.1%	727
45–64	26.2%	70.7%	3.1%	2,265
Sex:	0 Partners	1 Partner	2 + Partners	N
Male	20.6%	64.3%	15.1%	1,382
Female	20.6%	73.4%	6.0%	2,216
Race/Ethnicity:	0 Partners	1 Partner	2 + Partners	N
White (non-Hispanic)	20.1%	70.9%	9.0%	2,900
Black (non-Hispanic)	21.2%	71.3%	-- ³	242
Hispanic/Latino	-- ³	64.0%	-- ³	274
¹ "Number of sexual partners in past year" is a state-added question administered to a sub-sample of BRFSS respondents and represents the number of people a respondent reports having sex with. Sex was defined by the interviewer as including oral, vaginal, or anal sex. ² Only respondents with known values are included in this table. Column sub-totals may not equal overall total due to missing values. ³ Unstable estimates with N < 50 or relative standard error >30% are suppressed Data Source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2011				

Table 28. Number of sexual partners in the past year¹, male BRFSS respondents ages 18–64: Massachusetts, 2011

	0 Partners	1 Partner	2+ Partners	N ²
Total Males	21%	64%	15%	1,382
Age in Years:	0 Partners	1 Partner	2+ Partners	N
18–24	-- ³	-- ³	-- ³	48
25–34	-- ³	59.0%	-- ³	142
35–44	8.9%	79.1%	12.0%	278
45–64	20.3%	74.1%	5.6%	898
Race/Ethnicity:	0 Partners	1 Partner	2+ Partners	N
White (non-Hispanic)	19.9%	66.5%	13.6%	1,131
Black (non-Hispanic)	14.1%	71.6%	14.3%	84
Hispanic/Latino	-- ³	-- ³	-- ³	85
Sex of Partner⁴:	0 Partners	1 Partner	2+ Partners	N
Same Sex	Not Applicable	52.1%	47.9%	64
Opposite Sex	Not Applicable	82.9%	17.1%	1,044
¹ "Number of sexual partners in past year" is a state-added question administered to a sub-sample of BRFSS respondents and represents the number of people a respondent reports having sex with. Sex was defined by the interviewer as including oral, vaginal, or anal sex. ² Only respondents with known values are included in this table. Column sub-totals may not equal the overall total due to missing values. ³ Unstable estimates with N < 50 or relative standard error >30% are suppressed ⁴ Only asked of adults reporting sex (including oral, vaginal, or anal sex) in the past year Data source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2011				

Table 29. Number of sexual partners in the past year¹, female BRFSS respondents ages 18–64 Massachusetts, 2011				
	0 Partners	1 Partner	2+ Partners	N²
Total Females	21%	73%	6%	2,216
Age in Years:	0 Partners	1 Partner	2+ Partners	N
18–24	-- ³	-- ³	-- ³	70
25–34	9.4%	84.8%	5.8%	288
35–44	12.3%	81.4%	6.4%	449
45–64	32.2%	67.2%	-- ³	1,367
Race/Ethnicity:	0 Partners	1 Partner	2+ Partners	N
White (non-Hispanic)	20.3%	75.3%	4.5%	1,769
Black (non-Hispanic)	27.8%	71.0%	-- ³	158
Hispanic/Latino	14.4%	71.6%	-- ³	189
Sex of Partner⁴:	0 Partners	1 Partner	2+ Partners	N
Same sex	Not Applicable	-- ³	-- ³	37
Opposite sex	Not Applicable	93.0%	93.0%	1,507
¹ "Number of sexual partners in past year" is a state-added question administered to a sub-sample of BRFSS respondents and represents the number of people a respondent reports having sex with. Sex was defined by the interviewer as including oral, vaginal, or anal sex. ² Only respondents with known values are included in this table. Column sub-totals may not equal overall total due to missing values. ³ Unstable estimates with N < 50 or relative standard error >30% are suppressed ⁴ Only asked of adults reporting sex (including oral, vaginal, or anal sex) in the past year Data source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2011				

Table 30. Condom use at last sex, BRFSS respondents ages 18–64¹: Massachusetts, 2011		
	% Used Condom	Total N²
Total:	24.8%	2,659
Sex:	% Used Condom	Total N
Male	25.9%	1,117
Female	23.7%	1,542
Race/Ethnicity:	% Used Condom	Total N
White (non-Hispanic)	24.5%	2,167
Black (non-Hispanic)	30.6%	173
Hispanic/Latino	21.3%	192
Number of Partners:	% Used Condom	Total N
1	19.5%	2,465
2	32.8%	97
3+	-- ³	79
Sex of Partner:	% Used Condom	Total N
Male Respondent Reporting Sex with Male	-- ³	63
Male Respondent Reporting Sex with Female	24.1%	1,049
Female Respondent Reporting Sex with Female	-- ³	37
Female Respondent Reporting Sex with Male	23.2%	1,501
¹ Only asked of adults reporting sex (including oral, vaginal, or anal sex) in the past year ² Only respondents with known values are included in this table; Column sub-totals may not equal overall total due to missing values ³ Unstable estimates with N < 50 or relative standard error >30% are suppressed Data Source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2011		

Table 31. Ever tested for HIV¹, BRFSS respondents age 18–64: Massachusetts, 1994–2010²

Year:	Total N ³	% Ever Tested for HIV
1994	2,595	30.0%
1995	2,429	36.7%
1996	2,659	38.7%
1997	2,718	46.1%
1998	3,840	42.3%
1999	5,605	46.2%
2000	5,618	47.8%
2001	5,787	46.4%
2002	5,906	47.0%
2003	6,281	46.7%
2004	6,454	46.2%
2005	6,508	41.4%
2006	8,751	36.8%
2007	13,801	43.6%
2008	13,534	40.6%
2009	10,358	43.3%
2010	10,169	44.5%

¹ This question was one of the core federal questions posed to all respondents to the annual BRFSS between the ages of 18-64

² 2011 data are not presented because new weighting methodology (raking weight) implemented by CDC in 2011 makes this year not comparable with previous years.

³ Respondents with missing values for this item were not included in this table.

Data Source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 1994–2010

Table 32. Ever tested for HIV by number of sexual partners in past year¹, BRFSS respondents age 18–64: Massachusetts, 2011

	Total N ²	% Ever Tested for HIV
Total:	3,447	45.0%
Number of Partners:	Total N	% Ever Tested for HIV
0	874	32.6%
1	2,403	48.3%
2	94	-- ³
3+	76	-- ³

¹ "Number of sexual partners in past year" is a state-added question administered to a sub-sample of BRFSS respondents and represents the number of people a respondent reports having sex with. Sex was defined by the interviewer as including oral, vaginal, or anal sex.

² Total number of participants that responded to both number of sexual partners and ever tested for HIV

³ Unstable estimates with N < 50 or relative standard error >30% are suppressed

Data Source: Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2011